

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for automatically updating a plurality of anti-virus programs comprising the steps of:

initiating an update of a plurality of anti-virus programs by an update control program; wherein each of the anti-virus programs is associated with a virus profile that is separate from the plurality of anti-virus programs and the update control program, and stored in memory; wherein each virus profile includes virus signature patterns that allow the anti-virus program associated with the virus profile to detect the presence of viruses in files and transferred data that are being scanned by the anti-virus program;

determining information to be updated;

scheduling when updates are to occur and which anti-virus programs of the plurality of anti-virus programs are to be updated;

comparing at least one of version numbers, creation dates and modification dates of update files stored on a virus update server with the virus profiles;

transferring a plurality of updates; and

installing the plurality of updates.

2. (Original) The method of claim 1, wherein the initiating step comprises the step of:

periodically initiating an update.

3. (Original) The method of claim 1, wherein the initiating step comprises the step of:

initiating an update based on at least one predefined condition.

4. (Original) The method of claim 1, wherein the determining step comprises the step of:

determining information to update based on information relating to the information to be updated and on information relating to the plurality of updates.

5. (Cancelled)

6. (Cancelled)

7. (Original) The method of claim 4, wherein the information relating to the information to be updated and the information relating to the plurality of updates comprises script or data files including information indicating the information to be updated and the information relating to the plurality of updates.

8. (Original) The method of claim 1, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

9. (Original) The method of claim 8, wherein the standard protocol comprises hypertext transfer protocol or file transfer protocol.

10. (Original) The method of claim 1, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

11. (Original) The method of claim 1, further comprising the step of:
logging in to a server containing an update.

12. (Original) The method of claim 11, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

13. (Original) The method of claim 4, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

14. (Original) The method of claim 13, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

15. (Original) The method of claim 14, further comprising the step of:

logging in to a server containing an update.

16. (Original) The method of claim 15, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

17. (Original) The method of claim 16, wherein the standard protocol comprises hypertext transfer protocol or file transfer protocol.

18. (Cancelled)

19. (Original) The method of claim 17, wherein the information relating to the information to be updated and the information relating to the plurality of updates comprises script or data files including information indicating the information to be updated and the information relating to the plurality of updates.

20. (Original) The method of claim 17, wherein the initiating step comprises the step of:

periodically initiating an update.

21. (Original) The method of claim 17, wherein the initiating step comprises the step of:

initiating an update based on at least one predefined condition.

22. (Currently Amended) A system for updating a plurality of anti-virus programs comprising:

a processor operable to execute computer program instructions;

a memory operable to store computer program instructions executable by the processor; and

computer program instructions stored in the memory and executable to perform the steps of:

initiating an update of a plurality of anti-virus programs by an update control program; wherein each of the anti-virus programs is associated with a virus profile that is separate from the plurality of anti-virus programs and the update control program, and stored in the memory; wherein each virus profile includes virus signature patterns that allow the anti-virus program associated with the virus profile to detect the presence of viruses in files and transferred data that are being scanned by the anti-virus program;
determining information to be updated;

scheduling when updates are to occur and which anti-virus programs of the plurality of anti-virus programs are to be updated;
comparing at least one of version numbers, creation dates and modification dates of update files stored on a virus update server with the virus profiles;
transferring a plurality of updates; and
installing the plurality of updates.

23. (Original) The system of claim 22, wherein the initiating step comprises the step of:

periodically initiating an update.

24. (Original) The system of claim 22, wherein the initiating step comprises the step of:

initiating an update based on at least one predefined condition.

25. (Original) The system of claim 22, wherein the determining step comprises the step of:

determining information to update based on information relating to the information to be updated and on information relating to the plurality of updates.

26. (Cancelled)

27. (Cancelled)

28. (Original) The system of claim 25, wherein the information relating to the information to be updated and the information relating to the plurality of updates comprises script or data files including information indicating the information to be updated and the information relating to the plurality of updates.

29. (Original) The system of claim 22, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

30. (Original) The system of claim 29, wherein the standard protocol comprises hypertext transfer protocol or file transfer protocol.

31. (Original) The system of claim 22, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

32. (Original) The system of claim 22, further comprising computer program instructions to perform the step of:

logging in to a server containing an update.

33. (Original) The system of claim 32, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

34. (Original) The system of claim 25, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

35. (Currently Amended) The system of claim ~~35~~4, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

36. (Original) The system of claim 35, further comprising computer program instructions to perform the step of:

logging in to a server containing an update.

37. (Original) The system of claim 36, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

38. (Original) The system of claim 37, wherein the standard protocol comprises
hypertext transfer protocol or file transfer protocol.

39. (Cancelled)

40. (Original) The system of claim 38, wherein the information relating to the
information to be updated and the information relating to the plurality of updates
comprises script or data files including information indicating the information to be
updated and the information relating to the plurality of updates.

41. (Original) The system of claim 38, wherein the initiating step comprises the step
of:
periodically initiating an update.

42. (Original) The system of claim 38, wherein the initiating step comprises the step
of:
initiating an update based on at least one predefined condition.

43. (Currently Amended) A computer program product for updating a plurality of
anti-virus programs, comprising:
a computer readable medium;
computer program instructions, recorded on the computer readable medium,
executable by a processor, for performing the steps of

initiating an update of a plurality of anti-virus programs by an update control program; wherein each of the anti-virus programs is associated with a virus profile that is separate from the plurality of anti-virus programs and the update control program, and stored in the computer readable medium; wherein each virus profile includes virus signature patterns that allow the anti-virus program associated with the virus profile to detect the presence of viruses in files and transferred data that are being scanned by the anti-virus program;

determining information to be updated;

scheduling when updates are to occur and which anti-virus programs of the plurality of anti-virus programs are to be updated;

comparing at least one of version numbers, creation dates and modification dates of update files stored on a virus update server with the virus profiles;

transferring a plurality of updates; and

installing the plurality of updates.

44. (Original) The computer program product of claim 43, wherein the initiating step comprises the step of:

periodically initiating an update.

45. (Original) The computer program product of claim 43, wherein the initiating step comprises the step of:

initiating an update based on at least one predefined condition.

46. (Original) The computer program product of claim 43, wherein the determining step comprises the step of:

determining information to update based on information relating to the information to be updated and on information relating to the plurality of updates.

47. (Cancelled)

48. (Cancelled)

49. (Original) The computer program product of claim 46, wherein the information relating to the information to be updated and the information relating to the plurality of updates comprises script or data files including information indicating the information to be updated and the information relating to the plurality of updates.

50. (Original) The computer program product of claim 43, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

51. (Original) The computer program product of claim 50, wherein the standard protocol comprises hypertext transfer protocol or file transfer protocol.

52. (Original) The computer program product of claim 43, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

53. (Original) The computer program product of claim 43, further comprising computer program instructions for performing the step of:

logging in to a server containing an update.

54. (Original) The computer program product of claim 53, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

55. (Original) The computer program product of claim 46, wherein the transferring step comprises the step of:

transferring the update using a standard, non-standard, or proprietary protocol.

56. (Original) The computer program product of claim 55, wherein the installing step comprises at least one of:

decompressing a compressed update, decrypting an encrypted update, and copying a file included in an update to a directory.

57. (Original) The computer program product of claim 56, further comprising computer program instructions for performing the step of:

logging in to a server containing an update.

58. (Original) The computer program product of claim 57, wherein the logging in step comprises at least one of:

transmitting a username and password, filling and submitting an online form, accessing a cookie, and redirecting to another location.

59. (Original) The computer program product of claim 58, wherein the standard protocol comprises hypertext transfer protocol or file transfer protocol.

60. (Cancelled)

61. (Original) The computer program product of claim 59, wherein the information relating to the information to be updated and the information relating to the plurality of updates comprises script or data files including information indicating the information to be updated and the information relating to the plurality of updates.

62. (Original) The computer program product of claim 59, wherein the initiating step comprises the step of:

periodically initiating an update.

63. (Original) The computer program product of claim 59, wherein the initiating step comprises the step of:

initiating an update based on at least one predefined condition.

64. (New) The method of claim 1, wherein the comparison involves file sizes, and presence or absence of files.

65. (New) The method of claim 1, wherein the comparison involves the version numbers, the creation dates, the modification dates, file sizes, and presence or absence of files.

66. (New) The method of claim 1, wherein the update control program includes a protocol handler, a configuration manager, an update scheduler, and unpacking routines.

67. (New) The method of claim 66, wherein the update scheduler provides a capability to schedule when updates are to occur and which of the virus profiles and the anti-virus programs are to be updated.

68. (New) The method of claim 67, wherein the configuration manager provides a capability to examine configurations to determine which of the virus profiles and the anti-virus programs are to be updated.

69. (New) The method of claim 68, wherein the determination is carried out by comparing the version numbers, the creation dates, and the modification dates of update files stored on the virus update server with the virus profiles.

70. (New) The method of claim 69, wherein the protocol handler provides a capability to transfer the updates using a plurality of protocols including hypertext transfer protocol (HTTP), file transfer protocol (FTP), and proprietary protocols.

71. (New) The method of claim 70, wherein the unpacking routines provide a capability to unpack the updates to correct locations by decompressing compressed files, decrypting encrypted files, and copying files to directories.

72. (New) The method of claim 71, wherein the update instructions control an operation of the update control program by specifying when updates are to occur and which of the virus profiles and the anti-virus programs are to be updated; the version numbers, and the creation and modification dates that are to be used to determine what needs to be updated; protocols that are to be used; and locations to which files are to be unpacked.